



Testimony of

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Before the

Subcommittee on Energy and Mineral Resources
House Committee on Resources

March 15, 2001

My name is Lisa Speer. I am Senior Policy Analyst with the Natural Resources Defense Council (NRDC) in New York. NRDC is a national nonprofit organization of scientists, lawyers, and environmental specialists, dedicated to protecting public health and the environment. Founded in 1970, NRDC serves more than 400,000 members from offices in New York, Washington, Los Angeles, and San Francisco. My testimony today addresses environmental issues surrounding natural gas exploration, development and production from submerged federal lands on the Outer Continental Shelf (OCS).

Background: Energy Policy in the 21st Century

At the dawn of a new century, America finds itself once again wrestling with a problem that has, off and on, been at the forefront of U.S. politics for several decades: energy. The United States has 5 percent of the world's population, but consumes nearly a quarter of the world's energy supply. We use energy to heat our homes and our businesses, power our computers and telephone systems, run our automobiles and aircraft, and drive our manufacturing plants and hospitals. In short, we have constructed an economy and a way of life that depends on the ready availability of energy.

Two distinct visions of an energy policy for the United States have emerged to meet these demands. One vision focuses chiefly on extracting as much energy as possible, mostly in fossil fuel form (oil, coal and natural gas), in hopes that supply can catch up with demand. The alternative vision, however, calls for encouraging innovation and new technology to meet our energy needs in an environmentally responsible manner. This vision emphasizes efficient use of energy, and places priority on using energy resources that are least damaging to our environment. It promotes economic growth and American industrial competitiveness. This energy path would not force consumers to make sacrifices. Instead it relies on improved technologies that will eliminate waste while increasing productivity and comfort.

Therefore, NRDC believes that U.S. energy policy must rely on the application of technological advances already in place and readily available as a way to reduce consumption. Such an approach will decrease America's reliance on foreign sources of energy in the near- and long-term, protect the environment, provide for America's energy needs, and buffer the economy against short-term swings in the market. NRDC's recently published report, A Responsible Energy Policy for the 21st Century examines these issues in detail. I ask that the report be included in the record.

Natural Gas resources of the Outer Continental Shelf

As the cleanest burning fuel, natural gas makes an important contribution to the nation's energy supply. However, its extraction and transport is not without environmental cost.

Some argue that natural gas development on the Outer Continental Shelf should be promoted. They argue that the risk of oil spills is negligible, and that environmentally sound development can take place. This argument ignores the reality that oil spills are not the only environmental concern related to OCS development. Offshore gas development, like oil development, causes substantial environmental impacts, including the following.

Onshore damage: The onshore infrastructure associated with offshore oil or gas cause significant harm to the coastal zone. For example, OCS pipelines crossing coastal wetlands in the Gulf of Mexico are estimated to have destroyed more coastal salt marsh than can be found in the stretch of land running from New Jersey through Maine. Moreover, the industrial character of offshore oil and gas development is often at odds with the existing economic base of the affected coastal communities, many of which rely on tourism, coastal recreation and fishing.

Water pollution: Drilling muds are used to lubricate drill bits, maintain downhole pressure, and serve other functions. Drill cuttings are pieces of rock ground by the bit and brought up from the well along with used mud. Massive amounts of waste muds and cuttings are generated by drilling operations – an average of 180,000 gallons per well.² Most of this waste is dumped untreated into surrounding waters. Drilling muds contain toxic metals, including mercury, lead and cadmium. Significant concentrations of these metals have been observed around drilling sites.³

A second major polluting discharge is "produced water," the water brought up from a well along with oil and gas. Offshore operations generate large amounts of produced water. The Minerals Management Service estimates that each platform discharges hundreds of thousands of gallons of produced water every day. Produced water typically contains a variety of toxic pollutants, including benzene, arsenic, lead, naphthalene, zinc and toluene, and can contain varying amounts of radioactive pollutants. All major field research programs investigating the fate and effects of produced water discharges have detected petroleum hydrocarbons, toxic metals and radium in the water column down-current from the discharge.

Air pollution: Drilling an average exploration well generates some 50 tons of nitrogen oxides (NOx), 13 tons of carbon monoxide, 6 tons of sulfur dioxide, and 5 tons of volatile organic hydrocarbons. Each OCS platform generates more than 50 tons per year of NOx, 11 tons of carbon monoxide, 8 tons of sulfur dioxide and 38 tons of volatile organic hydrocarbons every year.⁶

Oil spills: If offshore areas are leased for gas exploration there is always the possibility that oil also will be found. We no of no instance where a lease prohibits an oil company from developing oil if oil is found in a "gas prone" region. We are not aware of any company ever agreeing to such a condition in the history of the OCS program. Without such a restriction included in a lease there would be no assurances that oil in fact would not be developed, raising the possibility of an oil spill. According to statistics compiled by the Department of the Interior, some 3 million gallons of oil spilled from OCS oil and gas operations in 73 incidents between 1980 and 1999. Oil is extremely toxic to a wide

¹ Boesch and Rabalais, eds., "The Long-term Effects of Offshore Oil and Gas Development: An Assessment and a Research Strategy." A Report to NOAA, National Marine Pollution Program Office at 13-11.

² MMS, 2000. Gulf of Mexico OCS Oil and Gas Lease Sale 181, Draft Environmental Impact Statement (DEIS), p. IV-50.
³ Id.

⁴ Id., p. IV-32.

⁵ Id., p. IV-32-33.

⁶ *Id.*, p. IV-40.

⁷ MMS, 2000. Gulf of Mexico OCS Oil and Gas Lease Sale 181, Draft Environmental Impact Statement (DEIS), pp. IV-50.

variety of marine species, including marine birds, mammals and commercially important species of fish.

The OCS moratoria

Beginning in 1981 and every year since then, Congress has imposed restrictions on OCS leasing in sensitive areas off the nation's coasts. These moratoria now protect the east and west coasts of the U.S., Bristol Bay, Alaska, and most of the Eastern Gulf of Mexico. The moratoria reflect a clearly established consensus on the appropriateness of OCS activities in most areas of the country, and have been endorsed by an array of elected officials from all levels of government and diverse political persuasions, from former President George H.W. Bush to Governor Jeb Bush of Florida, and from Governor Tony Knowles of Alaska to Governor Gray Davis of California.

We strongly oppose any attempt to lift the moratorium, or to promote gas development in other sensitive OCS areas, including the Sale 181 area off the west coast of Florida and areas off Alaska. We have called on the Interior Department to remove these areas from the new Five Year OCS Program currently under development.

Drilling in the moratoria areas, the Sale 181 area and the Alaskan OCS is not necessary to meet our nation's energy needs.

Despite assertions from industry and their supporters on Capitol Hill, we do not need to drill in sensitive areas to meet America's energy needs. For example, industry is pressing to drill in the moratorium areas, the Eastern Gulf of Mexico, and off Alaska. But such drilling is unnecessary because seventy per cent of the nation's undiscovered, economically recoverable OCS oil and gas, and 80% of the nation's undiscovered, economically recoverable OCS gas, is located in the Central and Western Gulf of Mexico. Thus, removing the moratorium areas, the OCS off Alaska, and the Eastern Gulf of Mexico from the 5 Year Program will leave the vast majority of the nation's OCS oil and gas available to the industry.

In addition, large untapped energy efficiency resources exist that can provide more gas and oil at far less cost. For example, providing tax incentives for the construction of energy efficient buildings, manufacturing energy-efficient heating and water heating equipment could save 300 Tcf of natural gas over 50 years. This is more than twelve times the Interior Department's mean estimates of economically recoverable gas located outside the Central and Western Gulf of Mexico. These strategies will do far more to increase our nation's energy security than a "drain America first" policy of exploiting sensitive offshore and onshore federal lands.

Thank you for the opportunity to testify.

⁸ U.S. Department of the Interior, Minerals Management Service (MMS), 2000. Outer Continental Shelf Petroleum Assessment, 2000, page 5 and Gulf of Mexico Assessment Update.

⁹ NRDC, 2001. A Responsible Energy Policy for the 21st Century, p. 32.

U.S. Department of the Interior, Minerals Management Service (MMS), 2000. OCS Petroleum Assessment, 2000, p. 5 and Gulf of Mexico Assessment Update.